Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of the Petition of: MOTOROLA SATELLITE COMMUNICATIONS, INC. For Amendment of Parts 2 and 25 of the Commission's Rules to Allocate Additional Spectrum for Use by Non Geostationary Satellites Providing Mobile-Satellite Services.	RM No. _____
In the Matter of: Establishment of an Advisory Committee to Negotiate Proposed Regulations for the Provision of Mobile-Satellite Services Above 1 GHz.	CC Docket No. 92-166

EX PARTE PRESENTATION BY
MOTOROLA SATELLITE COMMUNICATIONS, INC.

Pursuant to Section 1.1206 of the Commission's rules and regulations, Motorola Satellite Communications, Inc. ("Motorola") hereby submits two (2) copies of the attached materials which were discussed by representatives of Motorola with the Chief Scientist and his staff and with the Deputy Chief, Common Carrier Bureau and his staff on October 8, 1992.

While these materials primarily related to the proposed negotiated rulemaking process, certain questions were addressed

at the meetings which could be construed as impacting upon Motorola's pending petition for rulemaking.

Respectfully submitted,

MOTOROLA SATELLITE
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October 9, 1992

MEETING WITH THE FEDERAL COMMUNICATIONS COMMISSION

On the Need to Expand the Scope of the Negotiated Rulemaking Proceeding

October 8, 1992

Purpose of Meeting

- Petition for Rulemaking to add MSS uplink spectrum - filed September 22, 1992.

- Request that scope of "Big" LEO negotiated rulemaking be expanded to consider alternative spectrum proposals such as those proposed in Motorola's Petition for Rulemaking.

RDSS Bands

- Five "Big" LEO applications and one GSO application need MSS spectrum above 1 GHz for MSS and RDSS.

- There is not enough spectrum in the RDSS bands for five viable "Big" LEO systems providing 2-way voice services.

  - 16.5 MHz downlink (2483.5-2500 MHz)
  - 16.5 MHz uplink (1610-1626.5 MHz)
  - Average amount of uplink spectrum per "Big" LEO applicant would be only 3.3 MHz

Motorola's Iridium System Application

- Motorola has applied to use 10.5 MHz (1616-1626.5 MHz) of the uplink band for its RDSS/MSS system on a bidirectional basis.

- WARC-92 allocated 12.7 MHz in the RDSS uplink band (1613.8-1626.5 MHz) for MSS downlinks on a secondary basis.

- No other spectrum was allocated for bidirectional MSS at WARC-92.

Petition for Rulemaking

- Motorola proposes that an additional 10.5 MHz of MSS uplink spectrum be made available and be be paired with the RDSS downlink band.

  - Would provide access to a total of 33 MHz of spectrum for four two-banded "Big" LEO systems use.

    - If all 4 other LEOs meet all required qualifications and go forward on a timely basis, equivalent to 8.25 MHz each.
    - If 3 meet all required qualifications and go forward on a timely basis, 11 MHz each.
    - If 2 meet all required qualifications and go forward on a timely basis, 16.5 MHz each.

Benefits of Concept

- Ensures success of negotiated rulemaking.
- Permits multiple entry.
  - FCC could accommodate both FDMA/TDMA and CDMA modulation schemes.
  - Would not have to dismiss any "Big" LEO applicants.
  - Marketplace would determine success of system(s).
- Permits rapid grant of all "Big" LEO applications.
- Permits use of only bidirectionally allocated band by bidirectional system.
  - Maximizes efficiency.
- Gives all applicants roughly equal amount of spectrum.
- In U.S., protects 1435-1525 MHz band currently allocated to aeronautical telemetry.

Two Specific Bands Identified

- Option 1: 10.5 MHz in the 1675-1710 MHz band.

  - Sharing between MSS uplinks and current users (Metsat/Metaids) is feasible.
    - Motorola submitted extensive technical showing on uplink sharing with its petition.
    - However, Motorola's bidirectional system cannot use this spectrum because of downlink operations.

  - Allocated at WARC-92 for MSS in Region 2.

    - Would give other "Big" LEO applicants:

      - worldwide 16.5 MHz downlink band (2483.5-2500 MHz)
      - worldwide 6.0 MHz uplink band (1610-1616 MHz)
      - Region 2 10.5 MHz uplink band around 1700 MHz.

    - Fully responsive to the proposals of all other "Big" LEO applicants to operate initially only in Region 2.

    - Unless paired with the 2483.5-2500 MHz downlink band, the 1675-1710 MHz band will not be used for MSS uplinks in the U.S. as a result of new RR722B, in which U.S. indicated the intention to retain an alternative allocation in the 1492-1525 MHz band for MSS downlinks.

  - Future WARCs could expand use of the 1675-1710 MHz band for MSS uplinks to other regions to increase global capacity as sharing proves to be successful.

- Option 2: 10.5 MHz from 1599.5-1610 MHz.
  - Continguous to current MSS/RDSS uplink beginning at 1610 MHz.
  - Currently used by Glonass system satellites.
    - But so is 1610-1616 MHz, which other "Big" LEOs have indicated they can share with Glonass.
    - The same operational and technical basis for sharing between LEO uplink systems and Glonass should therefore be feasible below 1610 MHz.
  - Motorola cannot use this band because its bidirectional downlink would cause interference with Glonass.

"Big" LEO Negotiated Rulemaking

- Proposed agenda appears limited to the RDSS bands.
- Lack of spectrum in RDSS bands makes it unlikely that the applicants will be able to reach consensus or an equitable division of spectrum.
- Consideration of feasibility of alternative bands should be explored in the industry advisory committee/working group.
- Consideration of alternative spectrum would facilitate finding a solution for accommodating all "Big" LEO applicants.
- Therefore, Motorola requests the Commission to
  - expand the scope of the negotiated rulemaking to include the bands 1675-1710 MHz and 1599.5-1610 MHz for MSS uplinks.
  - invite NTIA to participate in the negotiated rulemaking committee.

CERTIFICATE OF SERVICE

I, Philip L. Malet, hereby certify that the foregoing Ex Parte notification was served by first-class mail, postage prepaid, this 9th day of October 1992 on the following persons:

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